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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 09/770,518
Applicants : Pierre Messier *et al.*
Filed : January 26, 2001
Title : Antimicrobial Flash-Dry Disinfectant Aerosol
Art Unit : To Be Assigned
Examiner : To Be Assigned
Attorney Docket No. : 102785-246-NP

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION OF DAVID OHAYON UNDER 37 CFR § 1.132

I, DAVID OHAYON, Ph.D., of 53 Mulberry DDO, Canada, state and declare as follows:

1. I have worked for Triosyn Corporation ("Triosyn"), the owner of the subject application, since May 2002. I am currently the Senior Director of Chemistry and Quality Control Group, in the Research and Development Division at Triosyn. I received my Ph.D. in Chemistry from the University of Concordia in 2002. I am in charge of the Chemistry and Quality Control Group, and I am very familiar with Triosyn's antimicrobial flash-dry disinfectant aerosol product.
2. I have read and believe that I understand the above-identified patent application entitled "Antimicrobial Flash-Dry Disinfectant Aerosol."
3. I have read and believe that I understand EP 0842605A1 to Petri *et al.* ("Petri").
4. An experiment was performed under my direct control by DAVID CIARAVINO, B.Sc., Research Chemist, and TONY BARBIERI, B.Sc., Chemistry Technician, whom I supervise at Triosyn. In this experiment, several Petri compositions (based on Examples I-X from Petri on page 11) were prepared (*See*, Exhibit A). Several claimed compositions of the above-identified application (Solutions I-V) were also prepared (*See*, Exhibit B). In all Petri

compositions prepared in this experiment, surfactant Dobanol 91-10 or 91-8 was used instead of Dobanol 91-10 due to the nature of the commercially available product in which one or both forms exist. Both Dobanol 91-10 and Dobanol 91-8 are preferred nonionic surfactants disclosed by Petri (*See*, Petri, page 8, lines 12-14). In Petri compositions VI, VII, and VIII, Acusol (previously named Acrysol ICS-1) was used instead of Carbopol due to the lack of commercial supply of Carbopol. Both Carbopol and Acrysol ICS-1 are disclosed in Petri as preferred polycarboxylate polymers (*See*, Petri, page 4, lines 53-55). The amount of Thymol in Examples I and III, and the amount of Hydrogen Peroxide in Example V were different from those in Petri (*See*, asterisked numbers in Exhibit A). Test solutions were then sprayed onto stainless steel plates at room temperature. The time required for the surface to dry was recorded. Each solution was tested three (3) times. The average drying time of the Petri compositions is 26:26 \pm 7:20 (minute:second) (*See*, Exhibit A), and the average drying time of the claimed compositions of the above-identified application is 5:30 \pm 1:30 (minute:second) (*See*, Exhibit B). The difference of these two drying times is statistically significant ($p < 0.05$).

5. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United State Code, and that such willful false statements may jeopardize the validity of the validity of the application or any patent issuing thereon.

Dated: Jan 24/2007Signed: 

David Ohayon, Ph.D.

EXHIBIT A

Compositions (weight %)	I	II	III	IV	V	VI
Hydrogen Peroxide	2.0	1.0	1.0	1.0	1.5*	3.0
Betaine	1.0	1.0	0.05	0.5	0.3	3.0
Decyldimethylamine oxide (DDAO)	1.5	1.5	0.9	0.9	0.9	1.0
Thymol	0.005*	0.1	0.005*	—	—	—
Geraniol	—	—	—	0.1	—	—
Eucalyptol	0.1	—	0.1	—	—	—
Eugenol	—	—	—	—	0.15	0.2
HEDP	0.1	0.09	0.09	0.05	0.2	0.3
BHT	0.05	0.05	0.06	0.1	0.1	0.15
Tetraborate	0.5	0.5	0.5	1.0	1.0	1.5
Dobanol 91-10 or 91-8	0.1	0.05	0.05	0.5	0.5	1.0
Fatty Acid	—	0.1	0.1	—	—	—
Xanthan Gum	0.1	0.05	0.04	0.03	0.05	—
Acusol	—	—	—	—	—	0.5
Water	up to 100%					
NaOH up to pH 8.5						
Compositions (weight %)	VII	VIII	IX	X		
Hydrogen Peroxide	2.0	2.0	1.0	1.0		
Eucalyptol	—	—	0.5	—		
Geraniol	—	0.5	—	—		
Thymol	0.5	—	—	0.8		
Dobanol 91-10 or 91-8	2.0	1.0	1.0	1.0		
Betaine	1.5	1.5	1.0	2.0		
Acusol	0.5	0.5	—	—		
Xanthan Gum	—	—	0.3	0.4		
Water	up to 100%					
H ₂ SO ₄ up to pH 4						

* Amount different from those in Petri.

Drying Times (minute:second):	I	II	III	IV	V	VI
Trial 1	20:46	19:00	33:55	15:54	42:45	42:11
Trial 2	18:38	22:00	33:10	34:00	30:04	44:08
Trial 3	22:00	33:00	36:24	15:27	47:57	43:40
Average	20:28	24:40	34:30	21:47	40:15	43:20

Drying Times (minute:second)	VII	VIII	IX	X	Confidence Interval
Trial 1	20:00	12:54	18:24	27:09	
Trial 2	25:00	12:20	11:31	24:33	
Trial 3	16:00	18:03	22:15	29:58	
Average	20:20	14:26	17:23	27:13	26:26 ± 7:20

EXHIBIT B

Compositions (volume %)	I	II	III	IV	V
Hydrogen Peroxide	10	15	20	10	3
Ethanol	63.3	47.5	31.8	32	32
Water	up to 100%				

Drying Times (minute:second):	I	II	III	IV	V	Confidence Interval
Trial 1	5:38	6:10	8:18	4:14	4:50	
Trial 2	7:44	7:33	5:21	4:24	3:58	
Trial 3	7:30	3:57	4:55	4:48	3:13	
Average	6:57	5:53	6:11	4:29	4:00	5:30 ± 1:30